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10/598,398	12/22/2006	**Charles Watkinson**		3733

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BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte CHARLES WATKINSON

Appeal 2010-011703
Application 10/598,398
Technology Center 1700

Before CHARLES F. WARREN, PETER F. KRATZ, and
JEFFREY T. SMITH, *Administrative Patent Judges*.

KRATZ, *Administrative Patent Judge*.

DECISION ON APPEAL

This is a decision on an appeal under 35 U.S.C. § 134 from the Examiner's final rejection of claims 5-9. We have jurisdiction pursuant to 35 U.S.C. § 6.

Appellant's claimed invention is directed to a method for changing particle thickness size distribution of flakes formed by varying a distance between a cup or disc and an entrance to the gap between a pair of plates used in the flake formation until a desired particle thickness size distribution of the flakes of material is obtained.

Claim 5 is illustrative and reproduced below:

5. A method for changing a particle thickness size distribution of flakes of material, said flakes of material being formed by a process comprising the steps of:

feeding a stream of molten material in a downwards direction into a rotating cup or disc;

allowing the stream of molten material to pass over an edge of the cup or the disc for forcing the stream of molten material into a gap between a pair of plates surrounding the cup or the disc; and,

maintaining movement of the stream of molten material in an angular direction via a flow of air passing through the pair of plates and either side of the stream of molten material for pulling the stream of molten material, so that the stream of molten material is, and is kept, in a flattened state and, further, for pulling the stream of molten material so that, as solidification of the stream of molten material occurs, a sheet of solidified material is formed that brakes into said flakes of material, said method for changing the particle thickness size distribution of said flakes of material so formed, comprising the step of:

varying a distance between the cup, or the disc, and an entrance to the gap between the pair of plates until a desired particle thickness size distribution of said flakes of material is obtained.

The Examiner relies on the following prior art reference as evidence in rejecting the appealed claims:

Watkinson	5,017,207	May 21, 1991

Claims 5-9 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Watkinson.

We reverse the stated rejection. Our reasoning follows.

As the Examiner has correctly found, Watkinson discloses a method of flake formation from molten material, such as glass, that corresponds to the claimed method but for disclosing varying the distance between a rotating cup (5) or disc and an entrance to a gap (19) between a pair of plates (9, 11) to obtain a desired particle thickness size distribution of the flakes (Ans. 4-5; Watkinson, col. 3, ll. 5- 52).

However, Watkinson teaches that the selection of the diameter of the plates has an effect on flake size and thickness and that the size and thickness of the flakes can be varied by adjusting glass flow into the cup, the rotational speed of the cup, the distance between the plates, and vacuum pull or velocity through the gap by varying air flow (col. 2, ll. 20-65 and col. 3, ll. 53-66). Based on the teachings of Watkinson, the Examiner maintains that (Ans. 5):

> it would have been obvious to a person of ordinary skill in the art to try to vary the distance between the cup and the entrance gap in an attempt to vary the distance the material flows after leaving the cup and achieve a desired particle thickness distribution of flakes, as a person with ordinary skill has good reason to pursue the known options within his or her grasp. In turn, because altering the distance that the molten material travels by varying the parameters of the apparatus would change the distribution of size and/or thickness of the particles as predicted by the prior art, it would have been obvious to vary the distance between the cup and entrance to the gap between the pair of plates.

Moreover, the Examiner attempts to buttress the advocated obviousness position in responding to Appellant's arguments by pointing out that Appellant has acknowledged that the distance between the cup and the

plates was one of the many factors that could affect the size of the flakes produced; hence, one of ordinary skill in the art would have found it obvious to vary that distance as "it would have been within the technical grasp of a skilled artisan to vary this same distance to affect the particle size distribution" (Ans. 8-9; App. Br. 8-9; Spec. p. 4, ll. 9-10).[1]

We agree with Appellant, however, that the Examiner has not established that Watkinson would have suggested that one of ordinary skill in the art would have been led to try varying the distance between the cup and the entrance to the gap between the plates to obtain a desired thickness distribution of flakes (App. Br. 9-10). In this regard, Appellant, in the Specification, explains that (Spec. 4, ll. 13-20; *see also* Spec. 2, ll. 17-23 and App. Br. 5-6, and 9-10):

> Indeed, it had been assumed that any significant increase of the cup-plate separation, beyond the median at which an acceptable product is obtained, would lead to a deterioration of the product and in particular its flatness and any reduction simply reduced the nominal flake diameter. However, the surprising discovery is that the cup-plate separation can be substantially increased or decreased with a concomitant change in particle size distribution and without any other reduction in the quality of the product provided the nominal thickness difference is compensated for by one of the other parameters.

On this record, the Examiner has not established that one of ordinary skill in the art would have been led to vary the gap between the cup and plates of Watkinson to adjust the distribution of thicknesses of the flakes being made based on the teachings of

[1] EP 0 289 240, which is referenced at lines 10-11 of page 4 of the Specification, is not relied upon by the Examiner in the rejection before us. Thus, we do not consider this reference.

Watkinson as to adjusting other parameters to vary flake thickness size, not distribution.

It follows that we do not sustain the maintained rejection.

ORDER

The Examiner's decision to reject claims 5-9 under 35 U.S.C. § 103(a) as being unpatentable over Watkinson is reversed.

REVERSED

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